

What is claimed is:

1 1. A method comprising:
2 capturing an optical image to form raw data indicative of the optical image;
3 using values in a look-up table to transform the raw data into transformed data
4 indicative of a second image;
5 computing a white color balance of the second image; and
6 modifying the values in the look-up table based on the computed white color
7 balance.

1 2. The method of claim 1, further comprising repeating the using, computing
2 and modifying until the computed white color balance is at an acceptable level.

1 3. The method of claim 1, further comprising repeating the using, computing
2 and modifying for a predetermined number of iterations.

1 4. The method of claim 3, wherein the number of iterations depends on
2 whether the capturing is used to capture a still image or video.

1 5. The method of claim 1, further comprising:
2 modifying the transformed data to compensate for differences in responses to the
3 optical image between the image sensor and a human eye.

1 6. The method of claim 5, further comprising:
2 modifying the result of the modification of the transformed data to convert the
3 result into a predetermined color space.

1 7. The method of claim 1, further comprising:
2 before the transformation, modifying the raw data to interpolate pixel colors.

1 8. An image processing circuit comprising:
2 an image sensor to capture an optical image to form raw data indicative of the
3 optical image;
4 a look-up table storing values to transform the raw data into transformed data
5 indicative of a second image;
6 a white color balance circuit to compute a white color balance of the second
7 image; and
8 a second circuit to modify the values in the look-up table based on the computed
9 white color balance.

1 9. The image processing circuit of claim 8, wherein, for a single capture by
2 the image sensor, the second circuit repeatably modifies the values in the look-up table
3 and uses the white color balance circuit to compute the white color balance until the
4 computed white color balance is at an acceptable level.

1 10. The image processing circuit of claim 8, wherein, for a single capture by
2 the image sensor, the second circuit repeatably modifies the values in the look-up table
3 and uses the white color balance circuit to compute the white color balance for a
4 predetermined number of iterations.

1 11. The image processing circuit of claim 8, wherein the number of iterations
2 depends on whether the capturing is used to capture a still image or video.

1 12. The image processing circuit of claim 8, further comprising:
2 a color correction circuit to modify the transformed data to compensate for
3 differences in responses to the optical image between the image sensor and a human eye.

1 13. The image processing circuit of claim 8, further comprising:
2 a color space conversion circuit to convert the transformed data into a
3 predetermined color space.

1 14. The image processing circuit of claim 8, further comprising:
2 an interpolation circuit to modify the raw data to interpolate pixel colors.

1 15. The image processing circuit of claim 8, wherein the image processing
2 circuit comprises a camera.

1 16. An article comprising a storage medium readable by a processor-based
2 system, the medium storing instructions to cause a processor to:
3 use values stored in a look-up table to transform raw data provided by an image
4 sensor into transformed data that indicates an image,
5 compute a white color balance of the image, and
6 modify the values in the look-up table based on the computed white color balance.

1 17. The article of claim 16, the instructions causing the processor to repeatably
2 modify the values in the look-up table and compute the white color balance until the
3 computed white color balance is at an acceptable level.

1 18. The article of claim 16, the instructions causing the processor to repeatably
2 modify the values in the look-up table and computer the white color balance for a
3 predetermined number of iterations.